

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 03-162485

(43)Date of publication of application : 12.07.1991

(51)Int.Cl.

C09K 11/06

H05B 33/14

(21)Application number : 01-301503

(71)Applicant : PIONEER ELECTRON CORP

(22)Date of filing : 20.11.1989

(72)Inventor : MAGAI TAKENAO

NAMIKI TORU

NAKADA HITOSHI

WAKIMOTO TAKEO

MURAYAMA TATSUFUMI

(54) ELECTROLUMINESCENT ELEMENT

(57)Abstract:

PURPOSE: To provide an electroluminescent element having a fluorescent light-emitting layer consisting of a fluorescent thin film containing a condensed polycyclic compound and enabling an organic fluorescent material to emit light in high efficiency and luminance.

CONSTITUTION: The objective luminescent element has a fluorescent light-emitting layer consisting of a fluorescent thin film having a thickness of $\leq 1 \mu\text{m}$ and containing a condensed polycyclic compound such as naphthalene compound of formula I (R1 to R4 are H, carboxy, amino, OH or sulfo), fluorene compound of formula II (R8 and R9 are amino or nitro), tetracene compound of formula III (R11 to R15 are H, carboxy, amino, OH or sulfo), pyrene compound of formula IV (R16 to R19 are H, carboxy, amino, OH, sulfo or sulfonium) or coronene of formula V. It is preferable to insert an organic electron-transfer layer between the cathode and the fluorescent material layer.

